DYNAMIC PRESSURE BOOSTINGSOLUTIONS FROM GRUNDFOS



be think innovate



THE OPTIMAL CHOICE FOR RELIABLE AND EFFICIENT PRESSURE BOOSTING

Grundfos pressure boosting solutions are the optimal choice for commercial building, water supply, industry, and irrigation applications. Our complete packaged systems – the Grundfos Hydro MPC BoosterpaQ®, Hydro Multi-E, Hydro Multi-B, and CRE-Plus – are all UL-listed, use pumps with NSF61/ANSI 372 certification, and provide consistent, reliable and efficient pressure boosting to meet capacity requirements for your application.

COMMERCIAL BUILDINGS

Water flows can vary significantly throughout the day and place extraordinary demands on pumping equipment in commercial installations. Grundfos pressure boosting systems are designed to handle these challenges to provide comfortable and constant water pressure for users in:

- · High-rise/multi-story buildings
- Hotels
- Apartments
- Schools and dormitories
- Other institutional buildings

WATER UTILITY AND MUNICIPAL SETTINGS

Grundfos Hydro MPC BoosterpaQ® ensures that your water supply and wastewater facilities perform at their best. Whether your system is a large scale water utility or a smaller water system, the Hydro MPC BoosterpaQ is designed to meet your needs and requirements, as well as meet your system consumption and load profiles. The system features all the relevant functions for a perfect choice in pressure boosting and fits in many applications throughout the water cycle such as:

- Raw water intake
- Drinking water treatment
- Water distribution
- Wastewater distribution
- Wastewater transport and stormwater
- Wastewater treatment

INDUSTRY

Your industry can benefit from using a Grundfos pressure boosting solution, which are manufactured to handle even the most difficult applications with ease and accuracy.

- Food industries (dairy, brewing, processing)
- Petrochemical, pharmaceutical, and metal industries
- Water treatment plants
- Tourism and recreation (water parks, theme parks, fountains)

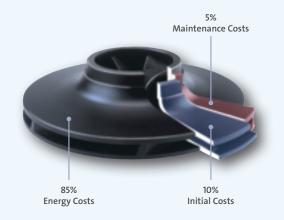
IRRIGATION

Grundfos packaged boosting solutions can help you conserve water, optimize crop yields, ease demands on piping networks, and automatically adapt performance at any pressure zone during the irrigation cycle. These systems provide dependable irrigation for:

- · Commercial landscaping
- Agriculture
- Sports arenas and golf courses
- · Parks and other recreational settings
- Nurseries

TAKING RESPONSIBILITY WITH SUSTAINABLE SOLUTIONS

On average, power consumption accounts for 85% of all costs incurred during the life cycle of a pump – nine times more than the initial purchase price and cost of regular maintenance. By choosing a Grundfos pressure boosting solution, you will be minimizing your life cycle costs while saving energy and reducing waste.







CU352 — CONTROL INTERFACE

HYDRO MPC BOOSTERPAQ®

TAKE YOUR BOOSTER SOLUTION TO NEW HEIGHTS

Grundfos Hydro MPC BoosterpaQ is a fully integrated system that brings the latest technology at the highest quality to you. Each component is made by Grundfos to meet the highest standards in the industry. The CUE 352 MPC controller can handle even the most difficult boosting applications with ease and accuracy. Based on the extremely reliable, high-efficiency CR pump range, this is a fully integrated system that ensures all technologies involved in the process work perfectly together.

BENEFITS OF THE HYDRO MPC BOOSTERPAQ

- Saves Energy Costs: Most efficient cascade control, application optimized software and pumps in the industry
- Single Source Responsibility: One manufacturer for pumps, motors, drives & control
- Plug-and-Pump: Easy to install and commission
- Easy to Operate: Large, clear, user friendly & advanced controls interface
- Reduce floor space: Space-saving complete solution
- Communication Capable: Ethernet and BUS communications option
- Drinking Water Approvals: NSF61/372, Hygienic designed 316 SS manifolds

VISIT WWW.BOOSTERPAQ.COM FOR MORE INFORMATION.

SYSTEM CONTROL AT YOUR FINGERTIPS

The CUE 352 MPC controller boasts many customized functions such as numerous BUS communication options, pump curve data loaded in for proportional pressure, built-in logging capability, and many more.

MLE MOTOR

Grundfos has eliminated the complexity in matching motor, drive and control logic components by providing a simple and effective out-of-the-box MLE motor solution to meet your variable speed application needs.

CR PUMP

As standard, the Hydro MPC BoosterpaQ features the world's number one multistage centrifugal pumps, the CR and CRE, which are known for their reliability, efficiency and adaptability.

MANIFOLDS

Grundfos manifolds use high precision production technologies that provide hydraulic optimization, reduced pressure loss and noise, and well as the best conditions to meet hygienic standards.



HYDRO MULTI-E

INNOVATIVE SOLUTIONS FOR PRESSURE BOOSTING APPLICATIONS

GRUNDFOS HYDRO MULTI-E

The Hydro Multi-E pressure booster system from Grundfos is an innovative boosting solution for residential/commercial building, municipal, and irrigation applications.

ENERGY SAVINGS AND COMFORT

The Hydro Multi-E system uses parallel mounted Grundfos CRE variable-speed pumps that have a reputation for providing the ultimate in efficiency and reliability.

AVAILABLE ACCESSORIES

- Diaphragm tank (required for low-flow shutdown)
- Grundfos GO remote for advanced pump control and status information
- CIU/CIM SCADA communication modules

BENEFITS OF THE HYDRO MULTI-E

- Thoroughly tested systems that arrive ready to install
- Simple installation and operation
- Integrated variable frequency drive motors that allow unique control functionality for increased comfort for the user and decreased operating costs
- Effective communication between pumps and control via GENIbus/RS485 interface
- High quality material construction that ensures durability and long life
- An affordable option for your pressure boosting applications
- NSF 61, Annex G / NSF 372 listed

CONTROL FEATURES

- Variable speed pumps (CRE)
- Constant pressure
- · Automatic pump changeover
- · Low flow shutdown
- Redundancy



HYDRO MULTI-B



CRE-PLUS

PRESSURE BOOSTING MADE SIMPLE

The Hydro Multi-B is a unique combination of compact efficient variable speed multistage pumps and simple user interface. Due to the simplicity of the CU 323 controller unit, all daily operations can be handled in a safe and simple manner, which makes the system ideal for water supply in most applications that fits within the performance range of the Multi-B pump system.

COMPACT AND DESIGNED TO LAST

The high quality components and the design of the Hydro Multi-B booster system have been chosen with a focus on sturdiness and compactness. As a result, the user gets the benefits of a complete solution, with components optimized for domestic water pressure boosting.

RELIABILITY

The CM pump has high reliability built-in. Clamping of the pumps impeller has been greatly improved by implementing a new stop ring to form a well-defined base. Combining this feature with a Nordlock© washer at the other end of the pump stack creates a robust and reliable design.

READY.....PUMP!

At Grundfos, Quality comes first. So before leaving the factory, every unit is completely assembled and thoroughly tested and inspected. This means that when customers receive their Hydro Multi-B booster system, it is only a matter of plugging it in and starting it up.

VARIABLE SPEED MAKES THE DIFFERENCE

The CRE-Plus is one of a wide range of E-pumps offered by Grundfos. It utilizes smart pump technology to vary motor output according to demand so energy is not wasted on generating pump speed that isn't required. CRE pumps maintain constant pressure at any time, even with the most challenging variations in demand.

THE CRE-PLUS INCLUDES:

- Pump
- Motor frame
- VFD with terminal box
- Service disconnect switch
- Inlet and discharge piping
- · Isolation valves
- Check valve
- Pressure transducer
- Low pressure inlet switch

FEATURES AND BENEFITS

- Superior efficiency plus variable speed control saves energy costs year after year
- Low-flow shutdown
- High-quality cartridge mechanical seal makes for easier maintenance and servicing without dismantling the pump
- All components pump, VFD motor, connections, and accessories – come from one supplier, which streamlines ordering and maintenance

FEATURES AND **FUNCTIONS OF THE BOOSTING PORTFOLIO**



HYDRO MPC BOOSTERPAQ®

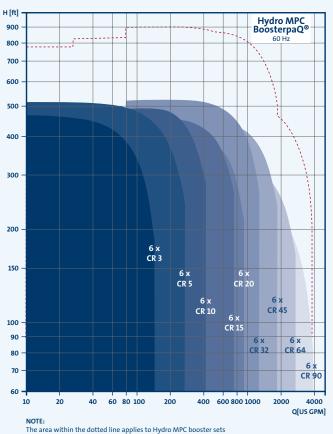
HYDRO MULTI-E **HYDRO** MULTI-B

CRE-PLUS

FEATURES / FUNCTIONS				
UL-listed Package Pumping System	Χ	Х	Х	Х
System NSF 61 / NSF 372 Certified	Х	Х	Х	Х
ASHRAE 90.1 - 2010 Compliant	Х	Х	Х	Х
Constant-pressure control	X	Х	Х	Х
Stop function (no flow shutdown)	Х	Х	Х	Х
Dry-run protection via digital input	Capable	Standard	Standard	Standard
Dry-run protection via analog input	Standard	-	Capable	-
SCADA communication capabilty	Χ	Х	Χ	-
Automatic cascade control	Χ	Х	Х	-
Forced pump changeover	Χ	Х	Х	-
Password protection	Х	-	Х	-
High-system pressure shutdown	X	-	Χ	-
_ow-system pressure shutdown	Χ	-	-	-
Pump curve data loaded into controller	X	-	-	
Proportional pressure control	X	-	-	-
Pumps outside of duty range protection	Χ	-	-	•
End of curve protection	Χ	-	-	•
Flowrate estimation (viewable on controller)	X	-	-	-
Advanced control interface	Χ	-	-	-
Alternative set-points	Χ	-	-	•
Pump test run	X	-	-	-
Clock program	X	-	-	-
Pilot pump	Χ	-	-	-
Set-point influence (via analog input)	X	-	-	-
Soft pressure build-up	X	-	-	-
Emergency run (via digital input)	Χ	-	-	-
imit exceeded 1 (flow, level, temp., etc.)	Χ	-	-	-
imit exceeded 2 (flow, level, temp., etc.)	Χ	-		-
Built-in logging capabilty	Χ	-	-	-
Battery back-up capability	Χ	-	-	-
Reduced Operation (via digital input)	Χ	-	-	-
Ethernet connection (built-in web server)	X	-		-

HYDRO MPC BOOSTERPAQ® PERFORMANCE RANGE

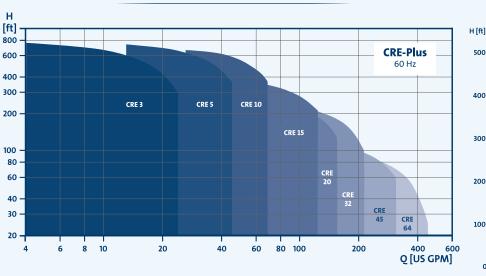
HYDRO MULTI-BPERFORMANCE RANGE



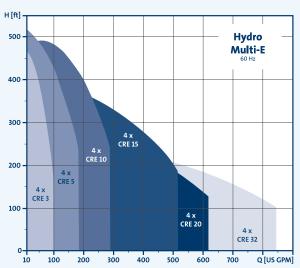
H [ft] Hydro Multi-B CME Ε 50/60 Hz ISO 9906:1999 Annex A 3 x CME 3 300 350 O [US GPM]

The area within the dotted line applies to Hydro MPC booster sets available on request. The performance range is based on the standard range of the CR and CRI pumps.

CRE-PLUSPERFORMANCE RANGE



HYDRO MULTI-EPERFORMANCE RANGE



GRUNDFOS TECHNICAL INSTITUTE

The Grundfos Technical Institute (GTI) offers busy professionals the opportunity to maintain their continuing education credits through a wide variety of flexible learning avenues.

Visit **www.grundfos.us/training**, to choose from a number of education possibilities that suit your needs and schedule, including face-to-face classes, group webinars and self-directed online courses.

GRUNDFOS BOOSTERS – IN A CLASS OF THEIR OWN

Grundfos is one of the world's leading manufacturers of pumps and pump systems and was the first company ever to develop a multistage in-line centrifugal pump.

With the new compact and efficient CME pumps, Grundfos has developed a solution that meets the needs of users, who require simplicity and compactness, without compromising reliability and efficiency.

The Grundfos Hydro Multi-E boosters are fully integrated systems made to the very highest standards. Thanks to the easy-to-operate controller, these boosters are simple to install and operate.

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GRUNDFOS Kansas City 17100 West 118th Terrace Olathe, Kansas 66061 Phone: (913) 227-3400 Fax: (913) 227-3500 GRUNDFOS Canada 2941 Brighton Road Oakville, Ontario L6H 6C9 Phone: (905) 829-9533 Fax: (905) 829-9512 GRUNDFOS Mexico Boulevard TLC No. 15 Parque Industrial Stiva Aeropuerto C.P. 66600 Apodaca, N.L. Mexico Phone: 011-52-81-8144 4000 Fax: 011-52-81-8144 4010

